

## **ANALYSING THE CONSUMER PREFERENCE FOR DAIRY PRODUCTS IN TRIVANDRUM CITY, INDIA**

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**Abstract:** The demand for livestock products are generally income elastic. The demand for dairy products is steadily increasing due to the changing consumption habits, dynamic demographic patterns, urbanization, changing lifestyle, etc. In this study an attempt was made to analyze the consumer preference for dairy products in Trivandrum city, India. The Thiruvananthapuram city total sample size of 120 household consumers were selected for the study. Tabular and percentage analysis was used to analyse the consumer preference for dairy products in Thiruvananthapuram city. Garret's ranking technique was adopted to analyse the reasons for the preference of the dairy products by household consumers in the study area. From the results it could be seen that almost all the sample households, irrespective of income level, preferred fluid milk. Among the dairy products, curd is preferred by all the sample households. Ice cream is the second most preferred dairy product followed by khoa, ghee, butter, paneer and cheese. In case of whole milk, nutritious value of milk was the first important reason for the household consumers. The other reasons for preferring whole milk were taste, satisfaction, quality, availability, low price and bulkiness. Satisfaction was the second important reason for preferring curd. Nutritious value was considered as third reason for preferring the curd followed by quality, availability, low price and bulkiness. The overall results revealed that the major reason in preferring the dairy products by household consumers was taste followed by satisfaction, quality, availability, nutritious value, low price and bulkiness.

**Keyword:** Dairy products – consumer preference – reasons – Garrett Ranking Technique.

### **Introduction**

In India, dairying is recognized as an instrument for social and economic development. The nation's milk supply comes from millions of small producers, dispersed throughout the rural areas. Milk production in India is dominated by small and marginal landholding farmers and by landless laborers who, in aggregate, own about 70 percent of the national milk animal herd. Kerala has been listed among the top five states in terms of clocking high growth in milk production. As per a recent study by the Assocham, Kerala stands in the third position among the states in terms of the growth in milk production. The demand for livestock products are generally income elastic. The demand for dairy products is steadily increasing

due to the changing consumption habits, dynamic demographic patterns, urbanization, changing lifestyle, etc. The consumers' tastes and preferences become more pronounced as wealth increases and hence variables, such as demographics, education, and ethnicity have more influence on demand (Bashir, 2011). In this study an attempt was made to analyze the consumer preference for dairy products in Trivandrum city, India

### **Data and methodology**

For this research work, Thiruvananthapuram city (Trivandrum), the capital of Kerala was purposively selected. The Thiruvananthapuram city has 6 zones. From each zone, 20 household consumers were selected by a simple random sampling procedure thus yielding a total sample size of 120 household consumers for the study.

### **Period of study**

The reference year for the present study was 2016 and the data collection was undertaken during the months of January, February, March and April (2016).

### **Methods of enquiry and collection of data**

A survey method was adopted for the collection of primary data from household consumers. Care was taken to collect primary data in such a way that the sample respondents fell in all the income groups. From the selected household consumers, pertinent data were collected to bring out the successful conclusion on the objectives of the study. The data were collected through personal questioning, by interviewing the sample respondent households with the help of well structured and pilot-tested interview schedule.

Tabular and percentage analysis was used to analyse the consumer preference for dairy products in Thiruvananthapuram city.

### **Garret's Ranking Technique**

Garret's ranking technique was adopted to analyse the reasons for the preference of the dairy products by household consumers in the study area. A list of reasons was given to the consumers to rank.

The reasons are taste, satisfaction, bulkiness, quality, availability, nutrition value and low market price. The order of merits given by the respondents was converted into the ranks by using the following formula

$$\text{Percent position} = \frac{100(R_{ij} - 0.50)}{N_j}$$

Where,

$R_{ij}$  = Rank given for  $i^{\text{th}}$  factor by  $j^{\text{th}}$  individual

$N_j$  = Number of factors ranked by  $j^{\text{th}}$  individual.

The percent position of each rank thus obtained was converted into scores by referring to the table given by Garret and Woodworth (1969). For each reason, the scores of the individual respondents were added together and divided by the total number of respondents for whom scores were given and thus based on the mean scores, the ranks were given.

## Results and discussion

### Consumer preference for various dairy products by sample households

The preference of sample households on various dairy products is given in Table 1. It could be seen from the table that almost all the sample households, irrespective of income level, preferred fluid milk. Among the dairy products, curd is preferred by all the sample households in Thiruvananthapuram city because of its hot and humid climate. Ice cream is the second most preferred dairy product followed by khoa, ghee, butter, paneer and cheese.

Income groupwise preference for ice cream showed that the majority of households were belonging to middle income group followed by high income and low income groups. In the preference of all other dairy products, majority of households belong to middle income group when compared to high income and low income groups. Among the dairy products, butter, Paneer and cheese were not preferred by low income households.

**Table 1: Preferences of sample households towards various dairy products**  
(No. of households)

| Income groups  | Milk   | Milk products  |   |  |  |   |  |   | Total number of households                |
|----------------|--|--|---|--|--|---|--|---|---|
|                |  | Curd   | Ghee  | Butter   | Paneer   | Cheese  | Khoa   | Ice cream   |   |
| <b>Low</b>     | 33<br>(27.50) <sup>a</sup><br>(100.00) <sup>b</sup>                      | 33<br>(27.50) <sup>a</sup><br>(100.00) <sup>b</sup>                      | 31<br>(31.0) <sup>a</sup><br>(93.93) <sup>b</sup>                         | .....  | .....  | .....   | 25<br>(33.74) <sup>a</sup><br>(75.75) <sup>b</sup>                     | 31<br>(27.19) <sup>a</sup><br>(89.93) <sup>b</sup>                      | <b>33</b><br><b>(100.00)<sup>b</sup></b>  |
| <b>Middle</b>  | 56<br>(46.60) <sup>a</sup><br>(100.00) <sup>b</sup>                      | 56<br>(46.6) <sup>a</sup><br>(100.00) <sup>b</sup>                       | 41<br>(41.00) <sup>a</sup><br>(73.21) <sup>b</sup>                        | 29<br>(50.00) <sup>a</sup><br>(51.78) <sup>b</sup>                     | 17<br>(50.00) <sup>a</sup><br>(30.35) <sup>b</sup>                     | 18<br>(43.90) <sup>a</sup><br>(32.14) <sup>b</sup>                        | 31<br>(41.89) <sup>a</sup><br>(55.35) <sup>b</sup>                     | 52<br>(45.61) <sup>a</sup><br>(92.85) <sup>b</sup>                      | <b>56</b><br><b>(100.00)<sup>b</sup></b>  |
| <b>High</b>    | 31<br>(25.83) <sup>a</sup><br>(100.00) <sup>b</sup>                      | 31<br>(25.83) <sup>a</sup><br>(100.00) <sup>b</sup>                      | 28<br>(28.00) <sup>a</sup><br>(90.32) <sup>b</sup>                        | 29<br>(50.00) <sup>a</sup><br>(93.54) <sup>b</sup>                     | 17<br>(50.00) <sup>a</sup><br>(54.83) <sup>b</sup>                     | 23<br>(56.09) <sup>a</sup><br>(74.19) <sup>b</sup>                        | 18<br>(24.32) <sup>a</sup><br>(58.06) <sup>b</sup>                     | 31<br>(27.91) <sup>a</sup><br>(100.00) <sup>b</sup>                     | <b>31</b><br><b>(100.00)<sup>b</sup></b>  |
| <b>Overall</b> | <b>120</b><br><b>(100.00)<sup>a</sup></b><br><b>(100.00)<sup>b</sup></b> | <b>120</b><br><b>(100.00)<sup>a</sup></b><br><b>(100.00)<sup>b</sup></b> | <b>100.0</b><br><b>(100.00)<sup>a</sup></b><br><b>(83.53)<sup>b</sup></b> | <b>58</b><br><b>(100.00)<sup>a</sup></b><br><b>(48.33)<sup>b</sup></b> | <b>34</b><br><b>(100.00)<sup>a</sup></b><br><b>(28.33)<sup>b</sup></b> | <b>41.00</b><br><b>(100.00)<sup>a</sup></b><br><b>(34.16)<sup>b</sup></b> | <b>74</b><br><b>(100.00)<sup>a</sup></b><br><b>(61.66)<sup>b</sup></b> | <b>114</b><br><b>(100.00)<sup>a</sup></b><br><b>(95.00)<sup>b</sup></b> | <b>120</b><br><b>(100.00)<sup>b</sup></b> |

Figures in parentheses indicate; a – Per cent to total across rows within columns; b – Per cent to total across columns within rows.

### Reasons for preference of dairy products by sample households

The scores for the reasons for preference were collected from the sample household consumers and were compared for their order of importance. Based on the total scores obtained for each reason, they were ranked and the results are presented in Table 2. The results revealed that taste was considered as the important reason for dairy product preference by household consumers in Chennai city. Similar result was reported by Grunert *et al.* (2000).

**Table 2: Reasons for preference of dairy products by Garret's ranking technique**

| S.No | Reasons          | Whole milk |      | Milk products |      |        |      |        |      |
|------|------------------|------------|------|---------------|------|--------|------|--------|------|
|      |                  | Score      | Rank | Ghee          |      | Butter |      | Cheese |      |
|      |                  |            |      | Score         | Rank | Score  | Rank | Score  | Rank |
| 1    | Taste            | 73.21      | II   | 82.41         | I    | 84.45  | I    | 81.18  | I    |
| 2    | Satisfaction     | 68.18      | III  | 78.23         | II   | 73.53  | III  | 79.38  | II   |
| 3    | Bulkiness        | 48.21      | VII  | 53.42         | VI   | 53.38  | VII  | 63.11  | VI   |
| 4    | Quality          | 63.41      | IV   | 69.14         | III  | 81.46  | II   | 74.81  | III  |
| 5    | Availability     | 61.52      | V    | 64.18         | IV   | 70.65  | IV   | 71.19  | IV   |
| 6    | Nutritious value | 78.32      | I    | 58.12         | V    | 65.18  | V    | 67.38  | V    |
| 7    | Low price        | 54.21      | VI   | 44.52         | VII  | 62.46  | VI   | 59.14  | VII  |

In case of whole milk, nutritious value of milk was the first important reason for the household consumers, as it is rich in calcium level that satisfy the nutritional requirement of households irrespective of age group. The other reasons for preferring whole milk were taste, satisfaction, quality, availability, low price and bulkiness. Satisfaction was the second important reason for preferring curd. Nutritious value was considered as third reason for preferring the curd followed by quality, availability, low price and bulkiness.

Satisfaction was considered as the second important reason for preferring ghee, paneer and cheese followed by quality, availability, nutritious value, bulkiness and low price. Similar result was observed by Fawi and Abdalla (2013).

The overall results revealed that the major reason in preferring the dairy products by household consumers was taste followed by satisfaction, quality, availability, nutritious value, low price and bulkiness.

### Summary and conclusion

The study on consumer preference for dairy products in Trivandrum city revealed that almost all the sample households, irrespective of income level, preferred fluid milk. Among the dairy products, curd is preferred by all the sample households. Ice cream is the second most preferred dairy product followed by khoa, ghee, butter, paneer and cheese. In case of whole milk, nutritious value of milk was the first important reason for the household consumers. The other reasons for preferring whole milk were taste, satisfaction, quality, availability, low price and bulkiness. Satisfaction was the second important reason for preferring curd. Nutritious value was considered as third reason for preferring the curd followed by quality, availability, low price and bulkiness. The overall results revealed that the major reason in preferring the dairy products by household consumers was taste followed by satisfaction, quality, availability, nutritious value, low price and bulkiness.

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